

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An image signal processing apparatus, comprising:

image capturing means of performing image capture using a plurality of types of color filters which are arranged based on repetition of a pattern determined in advance;

color change detecting means of performing color change detection regarding the result of said image capture;

luminance change detecting means of performing luminance change detection regarding the result of said image capture; and

luminance signal generating means of performing luminance signal generation regarding the result of said image capture based on a comparison between the result of said color change detection and the result of said luminance change detection,

wherein said color change detection is performed with respect to a predetermined direction corresponding to said pattern, and

wherein a dot-like pseudo signal is generated in said luminance signal at a color change point and is suppressed at said color change point where said result of said color change detection exceeds a predetermined level regarding said result of said luminance change.

2. (Cancelled).

3. (Previously Presented) The image signal processing apparatus of claim 1, wherein said pattern is a pattern having two pixels in the horizontal direction and four pixels in the vertical direction so as to arrange a color filter of magenta and a color filter of green in this order on a first line in the horizontal direction, a color filter

of yellow and a color filter of cyan in this order on a second line in the horizontal direction, a color filter of green and a color filter of magenta in this order on a third line in the horizontal direction and a color filter of yellow and a color filter of cyan in this order on a fourth line in the horizontal direction, and

said predetermined direction is the horizontal direction.

4. (Previously Presented) The image signal processing apparatus of claim 3, wherein said color change detection is performed in accordance with a change of said magenta in the horizontal direction and a change of said green in the horizontal direction.

5. (Previously Presented) The image signal processing apparatus of claim 4, wherein said color change detection is performed further in accordance with a change of said yellow in the vertical direction and a change of said cyan in the vertical direction.

6. (Previously Presented) The image signal processing apparatus of claim 4, wherein said color change detection is performed further in accordance with a change of said magenta in the vertical direction and a change of said green in the vertical direction.

7. (Previously Presented) The image signal processing apparatus of claim 1, wherein said pattern is a pattern having two pixels in the horizontal direction and two pixels in the vertical direction so as to arrange a color filter of red and a color filter of green in this order on a first line in the horizontal direction and a color filter of green and a color filter of blue in this order on a second line in the horizontal direction, and

said predetermined direction is the direction of a diagonal line.

8. (Previously Presented) The image signal processing apparatus of claim 7, wherein said color change detection is performed in accordance with a change of said red in the direction of the diagonal line and a change of said blue in the direction of the diagonal line.

9. (Previously Presented) The image signal processing apparatus of claim 7, wherein calculation for suppression of said pseudo signal is performed in accordance with a change of said red in the direction of the diagonal line and a change of said blue in the direction of the diagonal line.

10. (Currently Amended) An image signal processing circuit, comprising:

color change detecting means of performing color change detection regarding the result of image capture which is performed using a plurality of types of color filters which are arranged based on repetition of a pattern determined in advance;

luminance change detecting means of performing luminance change detection regarding the result of said image capture; and

luminance signal generating means of performing luminance signal generation regarding the result of said image capture based on a comparison between the result of said color change detection and the result of said luminance change detection.

wherein said color change detection is performed with respect to a predetermined direction corresponding to said pattern, and

wherein a dot-like pseudo signal is generated in said luminance signal at a color change point and is suppressed at said color change point where said result of said color change detection exceeds a predetermined level regarding said result of said luminance change.

11. (Currently Amended) An image signal processing method, comprising:

a color change detecting step of performing color change detection regarding the result of image capture which is performed using a plurality of types of color filters which are arranged based on repetition of a pattern determined in advance;

a luminance change detecting step of performing luminance change detection regarding the result of said image capture; and

a luminance signal generating step of performing luminance signal generation regarding the result of said image capture based on a comparison between the result of said color change detection and the result of said luminance change detection.

wherein said color change detection is performed with respect to a predetermined direction corresponding to said pattern, and

wherein a dot-like pseudo signal is generated in said luminance signal at a color change point and is suppressed at said color change point where said result of said color change detection exceeds a predetermined level regarding said result of said luminance change.

12. (Currently Amended) A recording medium which holds a program and which can be processed on a computer, the program making a computer execute the color change detecting step of performing color change detection regarding the result of image capture which is performed using a plurality of types of color filters which are arranged based on repetition of a pattern determined in advance, a luminance change detecting step of performing luminance change detection regarding the result of said image capture, and the luminance signal generating step of performing luminance signal generation regarding the result of said image capture based on a comparison between the result of said color change detection and the result of said luminance change detection, ~~which are of the image signal processing method of claim 11.~~

13. (Cancelled).

14. (Previously Presented) The image signal processing apparatus of claim 1,

wherein said result of said color change is a value, and

wherein said result of said luminance change is a value.

15. (Previously Presented) The image signal processing circuit of claim 10,

wherein said result of said color change is a value, and

wherein said result of said luminance change is a value.

16. (Previously Presented) The image signal processing method of claim 11,
wherein said result of said color change is a value, and
wherein said result of said luminance change is a value.

17. (New) An Image signal processing apparatus, comprising:

image capturing element operable to capture an image using a plurality of types of color filters which are arranged based on repetition of a pattern determined in advance;

color change detector operable to perform color change detection regarding the result of said image capture;

luminance change detector operable to perform luminance change detection regarding the result of said image capture; and

processor operable to generate a luminance signal regarding the result of said image capture based on a comparison between the result of said color change detection and the result of said luminance change detection.